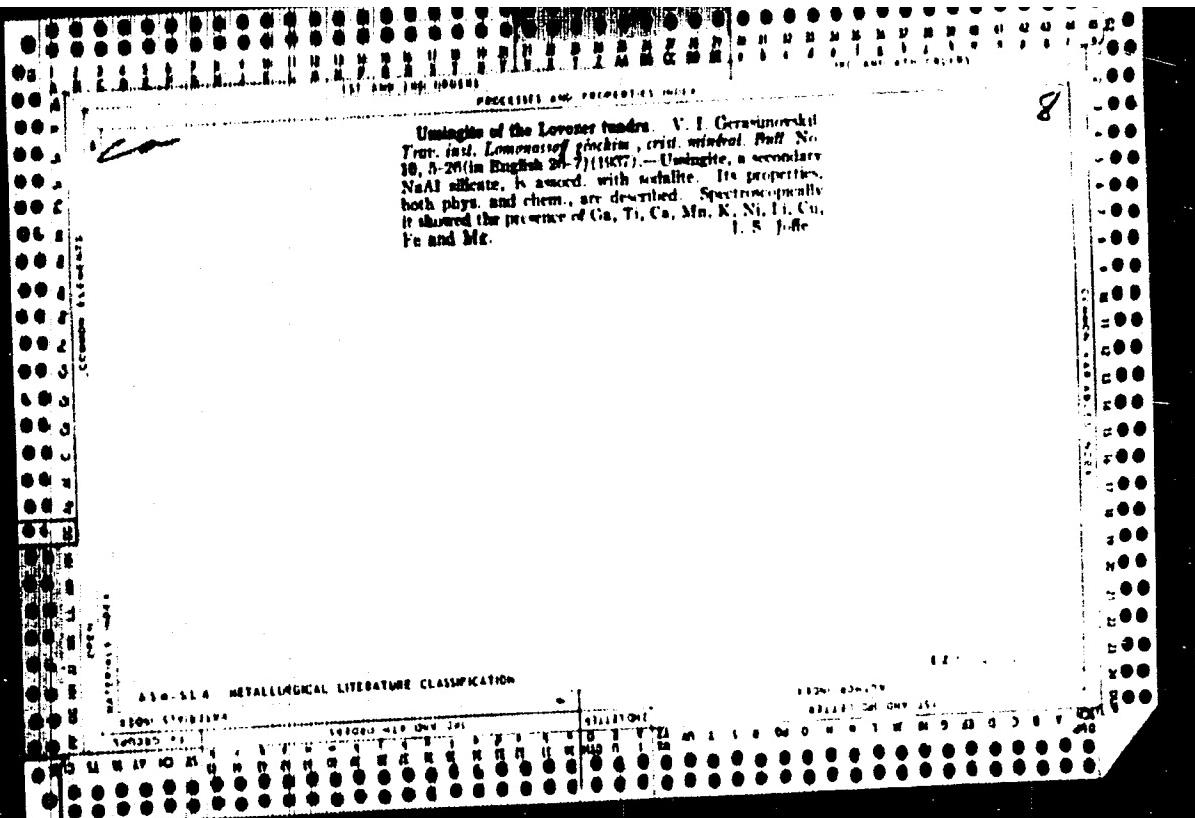
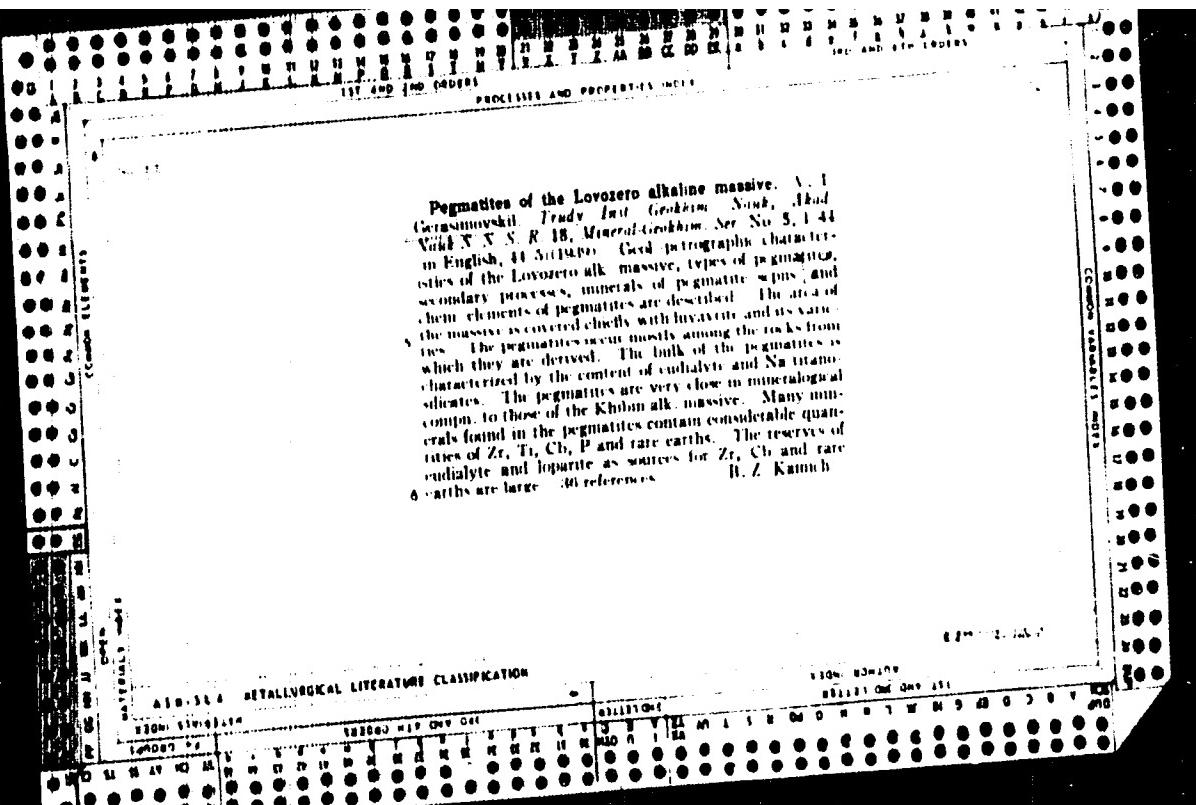


*C*

Gerasimovskii, V. I. Zirconium silicate in the Lower Tundra. *Rodn. Metal.*, 6 (1), 42 (1937). A new mineral containing  $ZrO_2$ ,  $Nb_2O_5$ , and  $Ta_2O_5$  was discovered in the Lower tundra. It is of a dark brown to black color, does not burn, and has a hardness of about 5.



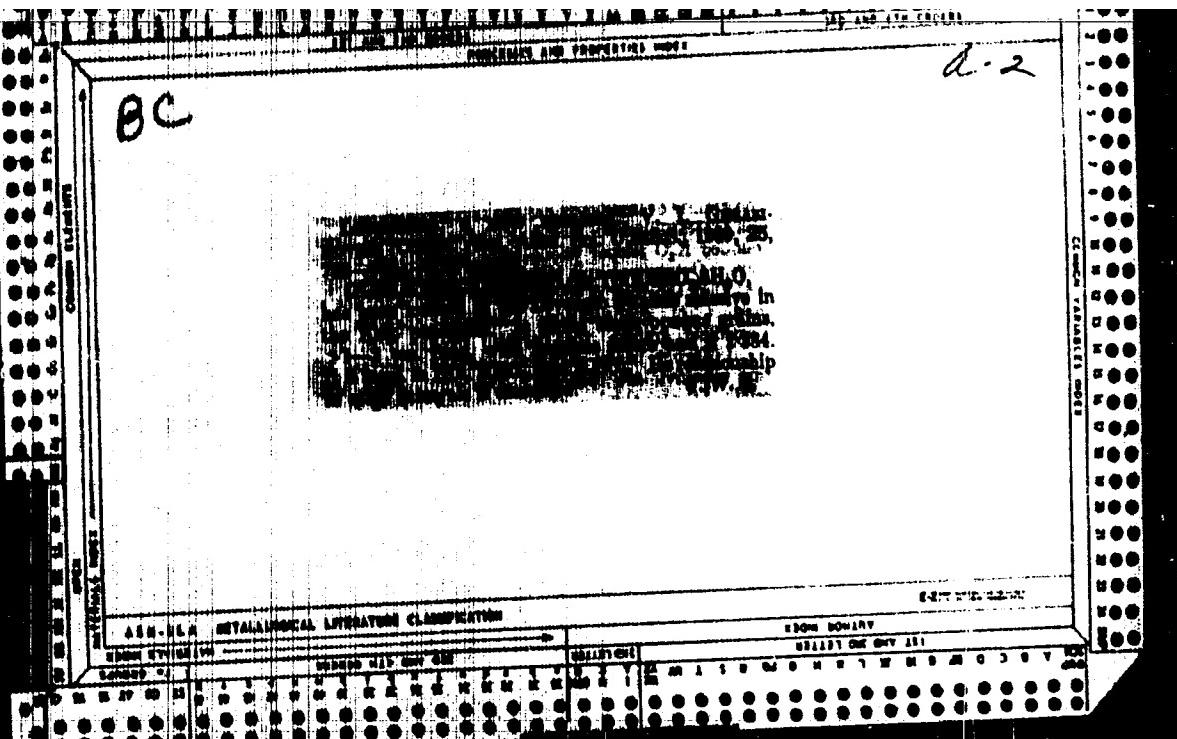


**Georgievsk** (Coapt. read.).—Chabazite  
Aegirine,  $\text{Ca}_2\text{Na}_2\text{Si}_5\text{O}_{12}$ , 1944, n. 1-544, ortho-  
(110)  $\times$  (001)  $\times$  (010),  $a = 10.4$ ,  $c = 10.0$ , several grains of  
the mineral, some of which contain small amounts of the  
mineral, and a few small grains of the mineral. X-Ray diagrams  
and analyses show the mineral to be chabazite. The mineral  
occurs as thin, elongated, light-colored, somewhat rounded, flaky  
crystals, often in groups, and also as small, irregular, light-colored  
masses.  $\text{CaO} 56.81$ ,  $\text{Na}_2\text{O} 14.47$ ,  $\text{SiO}_2 30.71$ ,  $\text{Al}_2\text{O}_3 0.22$ ,  $\text{MgO} 0.22$ , total 88.78%.  
Analyses of the mineral give the following results:  
 $\text{CaO} 56.81$ ,  $\text{Na}_2\text{O} 14.47$ ,  $\text{SiO}_2 30.71$ ,  $\text{Al}_2\text{O}_3 0.22$ ,  $\text{MgO} 0.22$ , total 88.78%.  
The modes  
of occurrence of the mineral are described. L. S. T.

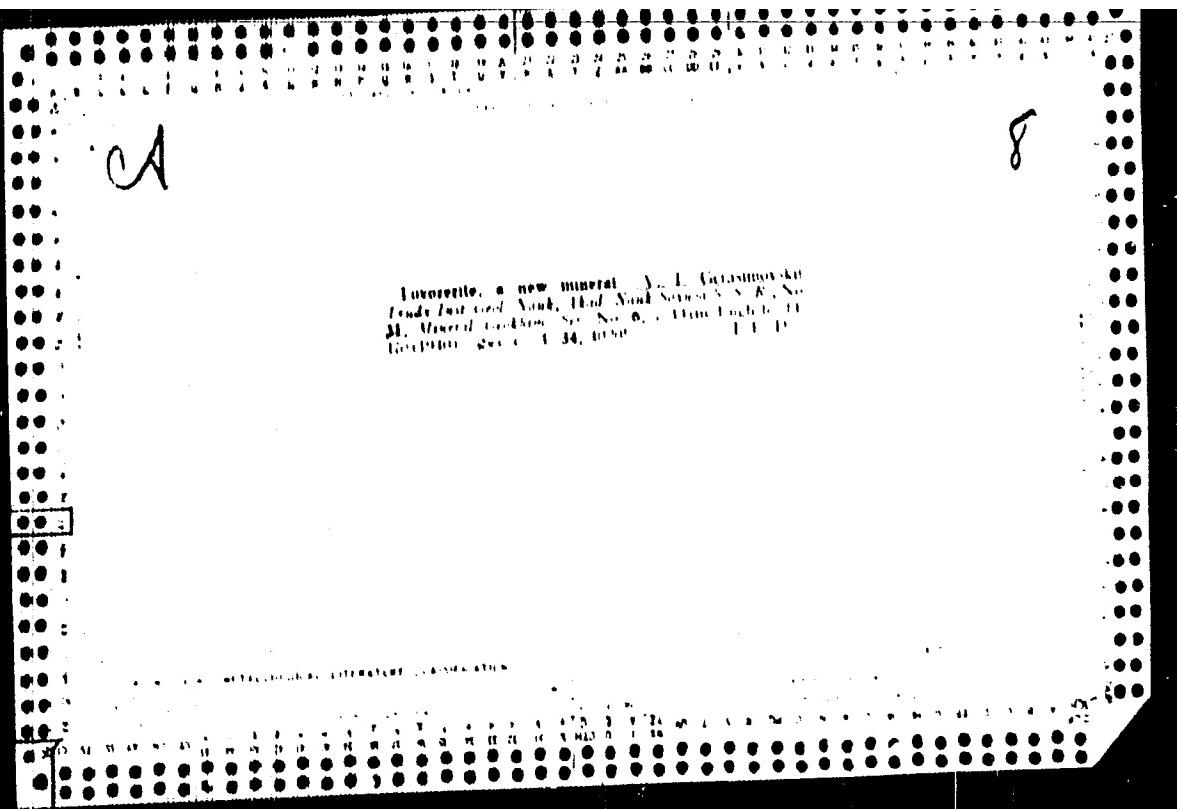
A-2

**APPROVED FOR RELEASE: 09/24/2001**

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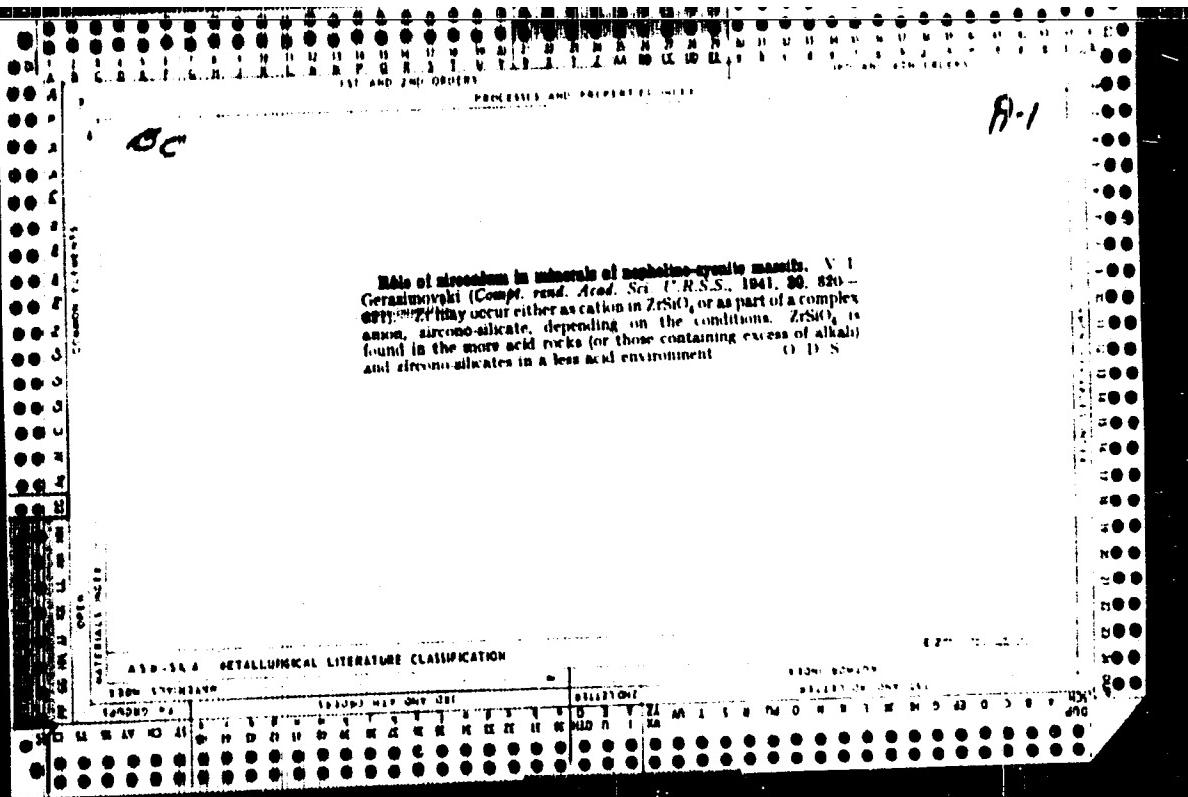
APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000514820010-0"



Manganositite from the Lovozero alkaline massif  
V. I. Goransky. *Trudy Inst. zem. Akad. Nauk SSSR* No. 11, Mineralogicheskii Ser. No. 6, 17-21 (in English, 21) (1940). Manganositite occurs in the form of plates and thin tablets in rocks and pegmatites of the Lovozero alk. massif. Color is iron black and it is opaque. Cleavage is absent; fracture is conchoidal to uneven.  $H = 6$ , sp. gr.  $\approx 4.60$ . It is insoluble.

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65.000

14. 12. 1966.

Villiaumite from Lovozero massif. V. I. Gerasimovskii (comp.)  
Sov. Acad. Sci. U.R.S.S., 1941, 82, 403-408).—Villiaumite (earniately NaF) occurs in intergrowths of krooerite as carmine-red grains.  
 $\lambda_{\text{max}}$  1-3253,  $\lambda_{\text{max}}$  1-3358,  $\lambda_{\text{max}}$  1-3268,  $\lambda_{\text{max}}$  1-3272. The X-ray spectrum agrees with NaF. It is found associated with sodalite-syenite and fayalite, and is probably widely distributed in the Lovozero and Chibay massifs.

Kordilite, a new mineral of the Lovozero tundra. V. I. Gerashchenko (Comp. rend. Akad. Nauk. U.R.S.S., 1941, 28, 498-499) Kordilite occurs as light-brown lamella,  $a = b = c = 0.730$ ,  $\beta = 95.27^\circ$ . Cleavage is marked along (100); hardness 5-6, sp. gr. 3.430,  $n_p = 1.662$ ,  $n_m = 1.630-1.640$ ,  $n_g = 1.618$ . X-Ray data show it to be rhombic. The empirical formula is  $\frac{1}{2}\text{Na}_2\text{O}(\text{Sr}, \text{Ca}, \text{Mn}, \text{Mg})\text{O}_{10.7}(\text{La}, \text{Dy}, \text{Y})\text{O}_3\text{NSiO}_3$ . Of the individual rare earths, cordilite contains  $\text{La}_2\text{O}_3$  8.65%,  $\text{Ce}_2\text{O}_3$  0.13%,  $\text{Pr}_2\text{O}_3$  1.8%,  $\text{Nd}_2\text{O}_3$  1.88%. It is found in pegmatites between sodalite grains.

L. I. J.

Metolopartite, a new mineral from the Lovozero Tundras. V. I. Gerasimovskii (*Compt. rend. Acad. Sci. U.R.S.S.*, 1941, **38**, 61-63). The mineral, which was discovered in the Lovozero alkaline massif (Kola peninsula), is a secondary mineral, closely resembling loparite. The physical and optical properties of the mineral are recorded, and an analysis is given.  
A. J. M.

1218. *Rare Earths in Minerals*, by I. B. Borovskiy and V. I. Gerasimovskiy, *Zemle*  
*Akademiya Nauk SSSR*, 1945, 4 p. (In Russian).  
Quantitative analyses, with X-ray spectroscopic methods, of rare earths present in  
minerals found in the Soviet Union are discussed.

GERASIMOVSKY, V. I.

PA 4T97

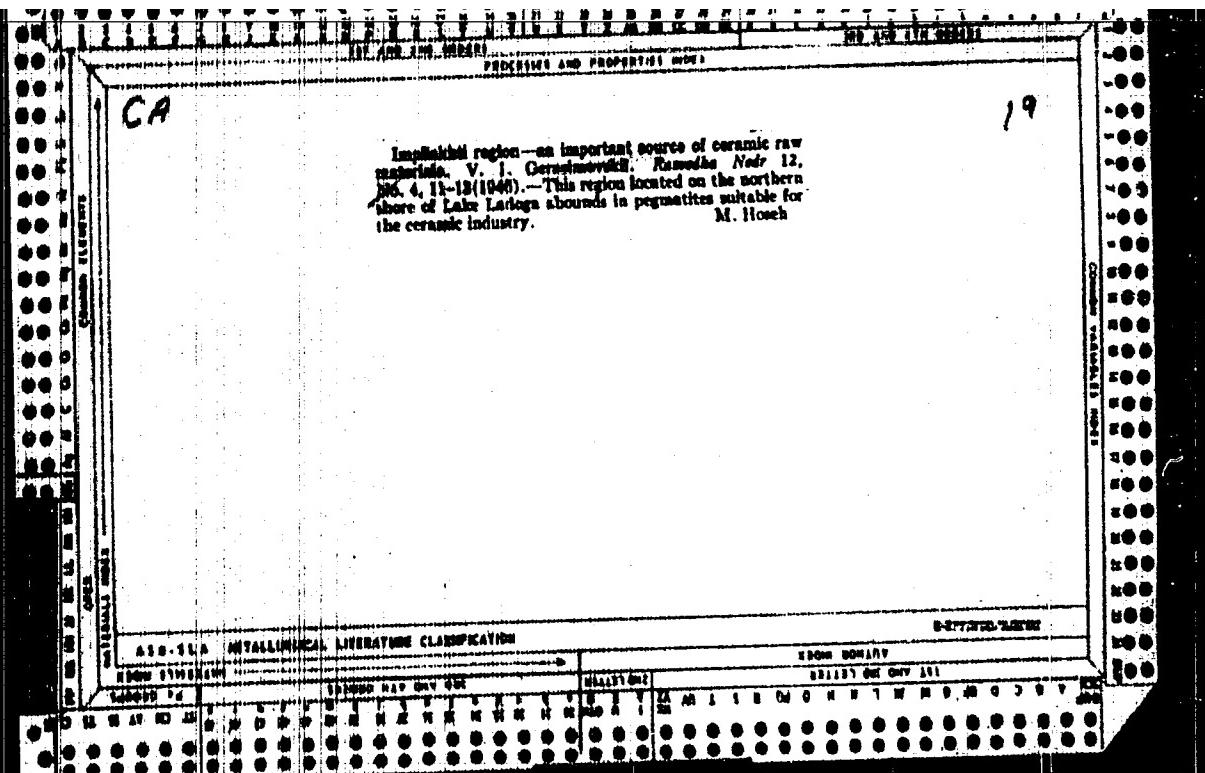
USSR/Minerals - Identification  
Rare earths

1945

"Rare Earths in Minerals," I. B. Borovsky and V. I. Gerasimovsky, 4 pp

"CR Acad Sci" Vol XLIX, No 5

Quantitative analyses, with X-ray spectroscopic methods, of rare earths present in  
minerals found in the Soviet Union.



"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000514820010-0

GERASIMOVSKIY, V. I.

"Rare Earths in Minerals," Dokl. AN SSSR, 49, No.5, 1947

APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000514820010-0"

GERASIMOVSKIY, V. I.

"Structure of the Luavrite Complex of Rocks in the Lovozerskiy Mountain Range,"  
Dokl. AN SSSR, 56, No.9, 1947

CA

8

Lomonosovite, a new mineral. V. I. Chernomyrskii.  
*Doklady Akad. Nauk S.S.R.* 70, 83-8 (1950).—Lomonosovite, scaly aggregates, without distinct crystal forms, is

dark brown to black, sometimes changing to violet-rose colored parts similar to murmanite; the luster is glassy or adamantine on cleavage, glassy to fatty on fractures. The mineral is brittle, hardness 3 to 4, d. 3.13, easily fused to a brown glass pearl in the oxidizing, to greenish yellow in the reducing, flame, but colorless after cooling. It is optically neg.;  $\alpha = 1.778$ ,  $\beta = 1.759$ ,  $\gamma = 1.670$ ;  $2V = 36^\circ$ . Pleochroism is distinct, chiefly between brown and rose-colored hues. Sections parallel to the cleavage plane sometimes show polysynthetic twinning lamellae. The symmetry is monoclinic or triclinic. The dark-brown variety contains 12.8%  $P_2O_5$  and 26%  $Na_2O$ ; the rose-colored contains 8 to 8.5%  $P_2O_5$ , 15.7 to 20.3%  $Na_2O$ , a trace of  $K_2O$ ,  $TiO_2$  up to 26.8%, and  $H_2O$  up to about 6%. The chem. compn. shows a series of transition types between murmanite,  $Na_2Ti_5Si_8O_{24}H_2O$ , and lomonosovite,  $Na_2Ti_5Si_8O_{24}$ ,  $Na_2PO_4$ , at the end members (theory of L. D. Borneman-Marynkevich). The  $Na_2PO_4$  in lomonosovite is easily leached out by dilut.  $H_2O$  even at room temp. The salt found after the evapn. of the leached soln. is  $Na_2PO_4 \cdot 7H_2O$ . The heating curve of lomonosovite shows at 900° the endothermic effect of the fusion of  $Na_2PO_4$ . The genesis of lomonosovite in pegmatites of large nephelin, syenite complexes, in paragenesis with hedenbergite, ussingite, lamprophyllite, eudialyte, arfvedsonite, microcline, and ramsayite is very characteristic. Secondary minerals are argite, nordite, neptunite, sphalerite, and molybdenite. Also the paragenesis with vilsmannite ( $Na_2F$ ) is very typical. If the residual magmatic solns. are high in water, lomonosovite is replaced by murmanite, leaching of  $Na_2PO_4$  from lomonosovite can form the latter mineral. W. Kittel

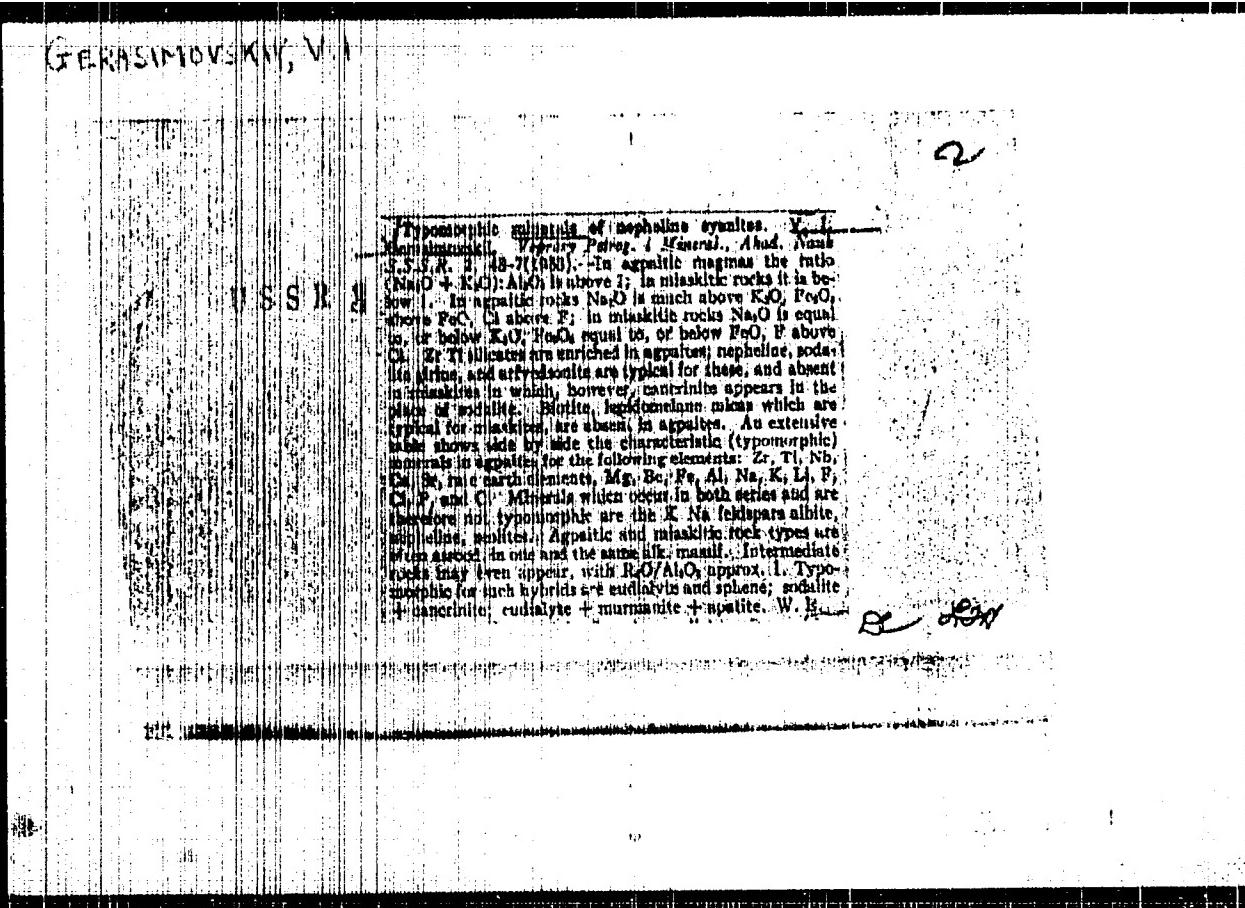
1957

C A

8

Belyankinite, a new mineral. V. I. Gerasimovskii and M. E. Kazakova. *Doblady Akad. Nauk SSSR*, 71, 923-7 (1950).—Details of the cupferron method are given, especially for the sepn. of Fe, Al, Ti, Zr, Nb, and Ta. The results suggest the complex formula  $2\text{CaO} \cdot 12\text{TiO}_3 \cdot 0.5\text{Nb}_2\text{O}_5 \cdot 2\text{Cr}_2\text{O}_3 \cdot \text{SiO}_2 \cdot 24\text{H}_2\text{O}$ ; by spectral analysis the presence of Hf, Pb, and traces of Cu are additionally established. The mineral is readily dissolved in HCl, HNO<sub>3</sub>, and H<sub>2</sub>SO<sub>4</sub>. The new mineral is observed in dense, plate-tabular yellow-brown aggregates. The following characteristics were observed: hardness 2-3; brittle with excellent tabular cleavage; sp. gr. 2.32 to 2.40; fusible in the blowpipe flame; optically neg.; elongation pow., 2V 21 to 25°, n about 1.740,  $\beta = 1.777$  (av.); pleochroism distinct; dark brown to reddish brown. The mineral is orthorhombic or monoclinic. It is often altered along fractures. The x-ray powder diagram (Cu and Fe radiation) did not show distinct interference lines; the Laue method gave some spots which establish the cryst. state of the mineral. The heating curve shows two endothermic dehydration effects at 150° and 400 to 450°, and an exothermic reaction at 750°. Belyankinite is found in pegmatites in foyrites. It occurs with microcline, epidote, nepheline, and aegirite. The nepheline is usually altered to scapolites. Belyankinite is often included in aegirite, and sometimes also in microcline; it is, therefore, older than the aegirite. In its exterior parts, the pegmatite contains abundant euclaylite, with black aegirite, tansyite, and lamprophyllite. Characteristic Christmas-tree-like or honeycomb-like cavities suggest the previous crystn. of villiaumite, which was later leached away by hydrothermal solution. Genetically, belyankinite is classified with mutsimite and homonosavite.

W. Etel



GERASIMOVSKIY, V. I.

"Niobium, Tantalum, and Titano-Magnetite Deposits in the USSR" (Nioby i Tantal v SSSR), Priroda, No.7, July 1954

Translation U-2720, 15 Dec 52

СЕКРЕТ FIG - СОВ. СССР  
LAVROVICH, Nikolay Stepanovich; BRITAYEV, M.D., redaktor; GERASIMOVSKIY, V.I.,  
redaktor; YERSHOV, A.D., redaktor; KONSTANTINOV, M.M.; NIFONTOV, R.V.,  
glavnyy redaktor; SAAKYAN, P.S., redaktor; SMIRNOV, V.I., redaktor;  
SOLOV'YEV, D.V., redaktor; CHERNOSVITOV, Yu.L., redaktor; SOSHNIKOVA,  
N.S., redaktor vypuska; SNEGZHENVA, N.A., redaktor izdatel'stva;  
AVERKIIENVA, T.A., tekhnicheskiy redaktor.

[Fluorspar; (fluorite).] Plavikovyi shpat (fliuorit). Moskva, Gos.  
nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1956. 133 p.  
(Otsenka mestoroshdenii pri poiskakh i razvedkakh, no.16).  
(Fluorite) (MLRA 10:9)

GERASIMOVSKIJ, V.I.

SUBJECT USSR / PHYSICS  
AUTHOR GERASIMOVSKIJ, V.I.  
TITLE The Minerals of Uranium.  
PERIODICAL Atomnaja Energija, 1, fasc. 4, 118-130 (1956)  
Issued: 19.10.1956

CARD 1 / 2

PA - 1521

Here those uranium minerals which are at present known are described. A table contains the chemical formula, color, syngony, hardness, specific weight, uranium content, and genesis of the following uranium minerals (which are the most spread):

Oxides: uranite, nasturan, remanent and regenerated platinum black (= pitchblend), uranothorianite.

Hydroxides: Becquerelite, curite.

Silicates: uranophan (uranotyl), beta-uranophan, kazolite, coffinite, nenaadkevite.

Sulphates: uranopylite, zippeite.

Carbonates: uranothallite (lybeite).

Sulphate-Carbonates: Schroeckingerite.

Phosphates: phosphuranylite, autunite, torbernite, metatorbernite, pearsonite.

Arsenates: uranospinitite, zeinerite, metazeinerite.

Vanadates: carnotite, tuyamunite.

Compound Oxides: davidite, brannerite. (These two minerals are titanates).

The following are titano-tantalo-nicobates: hatchettovite, elswortite, fergusonite, euxenite, polykras, samarkite, betafite, ampangabeite.

Atomnaja Energija, 1, fasc. 4, 118-130 (1956) CARD 2 / 2 PA - 1521

Organic Compounds: tucholite, karburan. These two compounds are mixtures of hydrocarbons with Th and U.

In the text of this paper also the more rare uranium minerals and their occurrence were discussed.

Enumeration is not complete; see Energia Nucleare, 2, No 2 (April 1956).

INSTITUTION:

Gerasimovskiy, V.I.

Mineralogical characteristics of uranium mineralization in the  
oxidation zone of the Shinkolobwe deposits. Geokhimiia no.7:73-  
76 '56. (MIRA 10:1)

I. Institut geokhimii i analiticheskoy khimii imeni V.I. Vernadskogo  
Akademii nauk SSSR, Moskva.  
(Shinkolobwe--Uranium ores)

89-12-6/29

AUTHOR: Gerasimovskiy, V. I.

TITLE: Occurrence of Uranium in Different Rocks (O formakh nakhozhdeniya urana v gornykh porodakh)

PERIODICAL: Atomnaya Energiya, 1957, Vol. 3, Nr 12, pp. 525-529 (USSR)

ABSTRACT: The problem of the form of uranium in rocks is of utmost significance for the settling of the conditions of formation of uranium deposits.

In 1910 this problem was dealt with by Vernadskiy for the first time.

Based on the latest researches the following can be said:  
1) The most different uranium minerals are formed (oxides, hydroxides, sulphates, carbonates, silicates, phosphates, arsenates, vanadates).

2) Uranium in consequence of isomorphous mixtures comes into the crystal lattice of non-uranium minerals.

3) In scattered condition uranium comes into the rock, namely:  
a) in absorbed form (ion absorption)

b) in dissolved condition in the rock water

After the formation of rock an exchange of the total content of uranium between the different mentioned phases takes place.

There are 2 tables, and 11 Slavic references.

Card 1/2

Occurrence of Uranium in Different Rocks

89-12-6/29

SUBMITTED: October 29, 1956

AVAILABLE: Library of Congress

Card 2/2

GERASIMOVSKIY, V.I.; TURANSKAYA, N.V.

Ageaitic nepheline-syenite minerals with a high lanthanum and cerium  
content in the Lovozero massif (Kola Peninsula). Geokhimiia no.4:334-336  
' 57.  
(MIRA 12:3)

1. V.I. Vernadskiy Institute of Geochemistry and Analytical Chemistry,  
Academy of Sciences, U.S.S.R., Moscow.  
(Lovozero region--Nepheline syenite)  
(Lanthanum) (Cerium)

GERASIMOVSKIY, V.I.; KAKHANA, M.M.; RODIONOVA, L.N.

Niobium and tantalum ratio in agpaitic rocks of the Lovozero alkaline massif. Geokhimiia no.5:417-419 '57. (MIRA 12:3)

I. V.I. Vernadsky Institute of Geochemistry and Analytical Chemistry,  
Academy of Sciences, USSR, Moscow.  
(Lovozero region--Feldspar) (Niobium) (Tantalum)

5(2) PAGE 1 BOOK INFORMATION 807/177

Abromov, S.M. Inventor's Methodology Manual

Methodology of Elements' Analysis, Preparation, Extraction, Analysis and Application (New York: 1956, 355 p., 2,000 copies printed).

Leng, M. L. Ryabchikov, Professor; Shustorov, I. P. Abramov, Corresponding Member, USSR Academy of Sciences; L. K. Serebryakov, Doctor of Chemical Sciences, R. V. Polyakova, Candidate of Chemical Sciences, V. I. Chumakov, Doctor of Chemical Sciences, N. N. Gerasimov, Doctor of Chemical Sciences, and Yu. S. Chukharev, Candidate of Arts, of Publishing House "Nauka" in Moscow and T. G. Lepet, Doctor of Chemical Sciences, Moscow.

**PURPOSE:** This book is intended for scientists, chemists, teachers and students of higher educational institutions, chemical and technical engineers and other persons concerned with the extraction, preparation, analysis of new earth elements.

**CONTENTS:** This collection contains reports presented at the June 1956 Conference on New Earth Elements at the Institute of Geochemistry and Analytical Chemistry of the Academy of Sciences USSR. The article deals with chemical methods of separating new earth elements, methods of processing new earth areas, ion exchange chromatography, chemical analysis, and some industrial applications of new earth elements. From contributing authors, the editors mention the following: Shustorov, Ryabchikov, who are conducting new earth element research; Ryabchikov, who are studying the properties of oxides and salts; Martynov, Matveev, who are investigating the properties of oxides and salts; Martynov, Matveev, especially, in a certain way; Ryabchikov, Chumakov, who are investigating the properties of new earth elements in their pure state; Ryabchikov, especially many complex substances and compounds of these elements which are separated by complex methods and are given at the end of each article.

## TABLE OF CONTENTS

- Gerasimov, V. I. (Institute of Geochemistry and Analytical Chemistry of the Academy of Sciences of the USSR), Geochemistry of New Earth Elements 29
- Vol'ken, M. I. (Radiochemistry Department, All Union [Radioactive] Bureau of the Academy of Sciences of the USSR), Separation of Alkaline Earth Elements from the Spectral Weight of Radiolytic Actinoids 42
- Ryabchikov, I. P. and P. M. Kostan (Institute of Scientific Research Institute), Separation of Some New Metal Elements and Obtaining It in the Pure State 49
- Ryabchikov, I. P. and O. P. Bobrikova (Institute of Geochemical Research Institute), Application of Spectroscopic Methods for the Separation of New Earth Elements into Substances of High Concentrations of Some Elements of the Periodic System 55
- Ryabchikov, I. P. and G. P. Koshegurova, Application of Complex-Forming Substances for the Separation of New Earth Elements by Fractional Precipitation of Heavy Salts 63

CONT 3/11

(c)

GKRSIMOVSKIY, V.I.

Symposium dedicated to the memory of V.I. Vernadskii on the  
95th anniversary of his birth [with summary in English]. Geokhimia  
no.3:283-284 '58. (MIRA 11:7)  
(Vernadskii, Vladimir Ivanovich, 1863-1945)

3(3)

AUTHORS: Gerasimovskiy, V. I., Lebedev, V. I. SOV/7-58-6-5/16

TITLE: On the Strontium .. Calcium Ratio in Rocks of the Lovozerkiy  
Massif ('O sootnoshenii strontsiya i kal'tsiya v porodakh  
Lovozerskogo massiva)

PERIODICAL: Geokhimiya, 1958, Nr 6, pp 553 .. 557 (USSR)

ABSTRACT: The authors investigated the nepheline syenites of the Lovozerkiy Massif (Kol'skiy poluostrov). The Sr and Ca content was flame photometrically determined (oxyacetylene torch, double glass monochromator, photo multiplier MM-17, rectifier VK-1). The massif was intrusively formed in several phases and consists of the following rocks: 1. Complex of porphyritic, poecilitic and other nepheline syenites; 2. Complex of lujavrites, foyaites and urtites; 3. Complex of eudialyte bearing lujavrites and porphyritic lujavrites which are in connection with the former mentioned, tawites (tavy) and poecilitic sodalite syenites; 4. Complex of young dike rocks. Rocks of the three first mentioned complexes were investigated (Table 2). Their content is between 0.008 and 1.75% SrO and 0.03 and 11.0% CaO. There is no direct connection

Card 1/3

On-the Strontium - Calcium Ratio in Rocks of the  
Lovozerkiy massif

SCV/7-58-6-5/16

although they have some maxima and minima in common (Diagram). Apart from Ca Sr is also substituted for K. Furthermore, Sr is genetically related with Na (Table 3). The most important minerals are: Lamprophyllite, belovite, apatite, norite, loparite, eudialyte, erikite, diaspistic rock, microcline (analyzed by V. A. Moleva), lovocerite. Investigations showed the following facts: Nepheline syenites of the Lovozerkiy massif have a comparatively high Sr/Ca ratio (0.033 to 0.541). Poecilitic sodalite syenites do not belong to the same intrusion phase as poecilitic nepheline syenites, as it was frequently assumed. The strontium content of miaskite rocks (first complex) is higher than that of agpaitic rocks (second and third complex). There are 1 figure, 3 tables, and 5 references, 2 of which are Soviet.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V.I. Vernadskogo AN SSSR, Moskva (Institute of Geochemistry and Analytical Chemistry imeni V.I. Vernadskiy, AS USSR, Moscow)

Card 2/3

3(0)

AUTHORS: Gerasimovskiy, V. I., Tuzova, A. M., Shevaleyevskiy, I. D. SOV/7-58-8-5/8

TITLE: On the Zirconium-Hafnium Ratio in Rocks of the Lovozerkiy Massif (O tsirkoniyevo-gafniyevom sootnoshenii v porodakh Lovozerkogo massiva)

PERIODICAL: Geokhimiya, 1958, Nr 8, pp 743 - 748 (USSR)

ABSTRACT: 48 rock samples from three magmatic complexes of the Lovozerkiy massif, Kola peninsula (Lovozerkiy massiv, Kol'skiy poluostrov) were examined. The zirconium and hafnium content was determined by the X-ray spectrometric method. The results are recorded in a table. The zirconium and hafnium content ranges from 0.07 to 2.31%  $ZrO_2$  and from 0.015 to 0.057%  $HfO_2$ , while the variations of the zirconium-hafnium ratio are insignificant. Zr and Hf are concentrated in later magmatic complexes: 0.167% in the first, 0.290% in the second and 1.49%  $ZrO_2$  in the third. Agpaitic rocks have a higher Zr and Hf content than miascitic rocks, but no relation between sodium-potassium and zirconium-

Card 1/2

On the Zirconium-Hafnium Ratio in Rocks of the  
Lovozerkiy Massif

SOV/7-58-8-5/8

hafnium contents could be observed. There are 1 figure,  
1 table, and 11 references, 6 of which are Soviet.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernads-  
kogo AN SSSR, Moskva (Institute for Geochemistry and Ana-  
lytical Chemistry imeni V. I. Vernadskiy AS USSR, Moscow)

SUBMITTED: July 15, 1958

Card 2/2

GERASIMOVSKIY, Vasiliy Ivanovich; SHCHERBINA, V.V., prof., otv.red.;  
BOYAKHSKIY, V.A., red-izd-va; YEGOROVA, N.P., tekhn.red.

[Deposits of uranium in foreign countries] Mestoroshdeniya  
urana zarubezhnykh stran. Moskva, Izd-vo Akad.nauk SSSR,  
1959. 140 p. (MIRA 12:12)  
(Uranium ores)

5(2)

PHASE I BOOK EXPLOITATION

SOV/2402

Akademiya nauk SSSR. Institut geokhimii i analiticheskoy khimii

Nedkozemel'nyye elementy; polucheniye, analiz, primeneniye (Rare Earth Elements; Production, Analysis, and Use) Moscow, Izd-vo AN SSSR, 1959. 331 p.  
5,000 copies printed.

Resp. Ed.: D. I. Ryabchikov, Professor; Eds. of Publishing House: D. N. Trifanov and T.G. Levi; Tech. Ed.: S. G. Markovich; Editorial Board: I. P. Alimarin, Corresponding Member, USSR Academy of Sciences, I. N. Zaozerskiy, Doctor of Chemical Sciences, R. V. Kotlyarov, Candidate of Chemical Sciences, V. I. Kuznetsov, Doctor of Chemical Sciences, M. M. Senyavin, Candidate of Chemical Sciences, and Yu. S. Sklyarenko, Candidate of Chemical Sciences.

PURPOSE: This book is intended for chemists in general and for geochemists and analytical chemists in particular.

COVERAGE: This collection of articles consists of reports presented at the Rare Earth Elements Symposium held in June 1956 at the Institute of Geochemistry

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Rare Earth Elements (Cont.)

SOV/2402

and Analytical Chemistry imeni V. I. Vernadskiy. The book may be divided into three sections: the characteristics, uses and production of rare earth elements (REE); the methods of analyzing REE; and the application of individual rare earth elements and REE mixtures in the glass and metallurgical industries, and their use as catalysts. Considerable space is devoted to the application of ion-exchange chromatography in the production of pure forms of all rare earth elements. The combinations of this method with other methods in separating REE on an industrial scale are discussed by D. I. Ryabchikov, Yu. S. Sklyarenko, and M. M. Senyavina. Chemical methods of separating REE compounds are discussed by I. N. Zaozerskiy (who is said to be the first in the USSR to develop methods of processing REE), V. P. Kotlyarov, Z. F. Andreyeva, A. V. Nikolayev, and G. P. Aleksandrov. Quantitative X-ray spectral analytical methods are described by E. Ye. Vaynshteyn, and chemical methods of analysis by I. P. Alimarin and F. I. Pavlotskaya. The determinations of REE impurities in pure products and atomic materials are discussed at length in three articles by A. N. Zaydel' and his associates. All articles are accompanied by photographs, diagrams, tables, and bibliographic references.

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Rare Earth Elements (Cont.)

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Card 9/9

MM/fal  
9-9-59

VLASOV, Kuz'ma Alekseyevich; KUZ'MENKO, Mariya Vasil'yevna; YES'KOVA,  
Yevdokiya Mikhaylovna; GERASIMOVSKIY V.I., doktor geologo-  
mineralogicheskikh nauk, otd.red.; GODOVIKOVA, L.A., red.izd-va;  
MAKINTI, Ye.V., tekhn.red.; KASHINA, P.S., tekhn.red.

[Lovozero alkali massif; rocks, pegmatites, mineralogy, geo-  
chemistry, and genesis] Lovozerkii shchelochnoi massiv; porody,  
pegmatity, mineralogija, geokhimiia i genezis. Moskva, Izd-vo  
Akad.nauk SSSR, 1959. 623 p. (MIRA 12:12)  
(Lovozero Tundras--Rocks, Igneous)

3(8), 3(0)

S07/7-59-1-7/14

AUTHORS: Gerasimovskiy, V. I., Lebedev, V. I.

TITLE: On the Distribution of Rubidium and Lithium in the Rocks of  
the Lovozerskiy Massif (распространение рубидия и лития в  
породах Ловозерского массива)

PERIODICAL: Geokhimiya, 1959, Nr 1, pp 60-63 (USSR)

ABSTRACT: The distribution of rubidium and lithium in the nepheline  
syenites of the Lovozerskiy Massif (Kola Peninsula) was inves-  
tigated. This intrusion consists of 4 stages containing the  
following rocks: 1) Evenly grained, porphyritic, poikilitic,  
and other varieties of nepheline syenite. 2) Lujavrites,  
foyaites, and uraites. 3) Eudialitic lujavrites, in connection  
with porphyritic lujavrites, tawites, and poikilitic sodalite  
syenites. 4) Complex of dike-rocks of recent formation. From  
the first complex (miaskitic) 4 samples, from the second com-  
plex (agpaitic) 16 samples, and from the third complex (also  
agpaitic) 9 samples were investigated.  $\text{Na}_2\text{O}$ ,  $\text{K}_2\text{O}$ ,  $\text{Li}_2\text{O}$  and  
 $\text{Rb}_2\text{O}$  contents were analyzed (Table). Lithium and rubidium  
were photometrically determined. The amounts vary greatly,  
 $\text{Rb}_2\text{O}$  between 0.0014 and 0.045%, and  $\text{Li}_2\text{O}$  between 0.0004 and

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SOV/7-52-1-7/14

On the Distribution of Rubidium and Lithium in the Rocks of the Lovozerkiy Massif

0.0320%. This may be explained by the great variations in the minerals occurring. There is no direct relation between the rubidium and potassium contents or between the lithium and magnesium contents. Rubidium and lithium were accumulated towards the end of the magmatic development in the rocks of the third stage. Lithium appears as characteristic element of the Lovozerkiy Massif. There are 1 table and 3 references, 1 of which is Soviet.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo AN SSSR, Moskva  
(Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy, AS USSR, Moscow)

SUBMITTED: July 29, 1958

Card 2/2

SOV/7-59-5-7/14

AUTHORS: Gerasimovskiy, V. I., Tuzova, A. M., Borisenok, L. A.,  
Rasskazova, V. S.

TITLE: Gallium in the Rocks of the Lovozero Alkaline Massif (Galliy  
v porodakh Lovozerskogo shchelochnogo massiva)

PERIODICAL: Geokhimiya, 1959, Nr 5, pp 449 - 454 (USSR)

ABSTRACT: Gallium was determined by the extraction with rhodamine B without previous separation of the other elements (method according to reference 4). The results are given in a large table (Table 1), arranged according to the four intrusion phases of the massif. Furthermore, the results of the spectroscopic gallium determination and the aluminum content are given. The aluminum determinations were carried out by Yu. B. Kholina. The Ga- and Al-values are given in a diagram as well. Another table (Table 2) gives the gallium content of individual minerals. The gallium contents fluctuate between 3 and  $10 \cdot 10^{-3}\%$ ,  $6 \cdot 10^{-3}\%$  is the average for the whole massif. This is more than the usual content of the nepheline syenites. The third intrusion phase has the highest gallium content. Gallium is enriched in the later phases, compared to aluminum. Gallium

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Gallium in the Rocks of the Lovozero Alkaline Massif SOV/7-59-5-7/14

is able to enter into the crystal lattice for aluminum as well as for trivalent iron, e.g. in agirine. There are 1 figure, 2 tables, and 6 references, 5 of which are Soviet.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo AN SSSR, Moskva (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy AS USSR, Moscow)

SUBMITTED: April 8, 1959

Card 2/2

21 (1), 3 (8)

AUTHOR: Gerasimovskiy, V. I.

SOV/89-7-1-3/26

TITLE: Characteristic Features of the Mineralogy of Uranium  
(Kharakternyye osobennosti mineralogii urana)

PERIODICAL: Atomnaya energiya, 1959, Vol 7, No 1, pp 47 - 56 (USSR)

ABSTRACT: On the basis of foreign and Russian papers, a survey was given, which dealt with the following characteristic features of uranium mineralogy: 1. All known uranium- and uraniferous minerals are oxygen carriers. 2. In minerals, uranium occurs only in the quadri- or hexavalent state. 3. A large part of the uranium occurrence in the crust of the earth is concentrated in minerals which are not uraniferous, the uranium occurring as isomorphic admixtures to other elements as e.g. thorium, zirconium, rare earths, etc. 4. Uranium and uraniferous minerals form in the course of the various mineral-forming processes. 5. Radioactivity is a characteristic feature of uranium and uraniferous minerals. There are 37 references, 25 of which are Soviet.

SUBMITTED: October 4, 1958

Card 1/1

GERASIMOVSKIY, V.I., pref.

Geochemistry of the rare earth elements. Priroda 48 no.6:19-26  
Je '59. (MIRA 12:5)

I.Institut geokhimii im. V.I. Vernadskogo AN SSSR, Moskva.  
(Rare earths)

GERASIMOVSKY, V. I.; LEBEDEV, V. I.

Cesium concentration in rocks of the Lovozero massif. Geokhimia  
no.6:545-546 '60. (MIRA 13:10)

1. Institut geokhimii i analiticheskoy khimii im. V.I.Vernadskogo  
AN SSSR, Moskva.  
(Lovozero tundras--Cesium)

GERASIMOVSKIY, V.I.; NESMYSYANOVA, L.I.

Distribution of lead and zinc in rocks of the Lovozero Massif.  
Geochemistry no.7:590-593 '60. (MIRA 13:11)

1. V.I. Vernadskiy Institute of Geochemistry and Analytical  
Chemistry, Academy of Sciences, U.S.S.R., Moscow.  
(Lovozero Tundras--Rocks, Igneous)  
(Lead) (Zinc)

Gerasimovskiy, V.I.; Venkina, V.A.

Niobium tantalum ratio in minerals of the Lovozero Massif. Geokhimia  
no.8:697-700 '60. (MIRA 14:1)

1. V.I.Vernadskiy Institute of Geochemistry and Analytical Chemistry,  
Academy of Sciences, U.S.S.R., Moscow.  
(Lovozero tundras--Mineralogy) (Niobium)  
(Tantalum)

GERASIMOVSKIY, V. I.

"Geochemistry of rare elements of the Lovozero alkaline massif"

Paper submitted at the International Geological Congress XXI Session  
1960 (Reports of Soviet Geologists) Problem No. 1, 15-24 Aug. 61

GERASIMOVSKIY, V.I.; KHITROV, V.G.

Geochemistry of boron in nepheline syenites of the Lovozero Massif  
Geokhimiia no.6:535-537 '61. (MIRA 14:6)

1. Institut geokhimii i analiticheskoy khimii imeni V.I.Vernadskogo  
AM SSSR i Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'-  
nogo syr'ya, Moskva.  
(Lovozero Tundras--Nepheline syenite)  
(Boron)

GERASIMOVSKIY, V.I.; POLYAKOV, A.I.; FEYGIN, Ya.M.

Structure of the differentiated lujavrite-foyaite-urtite rock  
complex of the Lovozero Massif. Dokl. AN SSSR 136 no. 3:700-  
703 Ja '61. (MIRA 14:2)

I. Institut geokhimii i analiticheskoy khimii imeni V.F.  
Vernadskogo. Predstavлено академиком A.P. Vinogradovym.  
(Lovozero tundras—Nepheline syenite)

SOLODOV, Nikolay Alekseyevich; VLASOV, K.A., glav. red.; GERASIMOVSKIY, V.I., doktor geol.-miner. nauk, otv. red.; PERSHINA, Ye.G., red. iad-va; SHEVCHENKO, G.N., tekhn. red.; RYLINA, Yu.V., tekhn. red.

[Internal structure and geochemistry of rare-metal granite pegmatites] Vnutrennee stroenie i geokhimiia redkometal'nykh granitnykh pegmatitov. Moskva, Izd-vo Akad. nauk SSSR, 1962.  
(MIRA 16:2)  
233 p.

1. Chlen-korrespondent Akademii nauk SSSR (for Vlasov).  
(Pegmatites)

GERASIMOVSKIY, V.I.; RASSKAZOVA, V.S.

Distribution of thallium in nepheline syenites of the Lovozero  
Tundras (Kola Peninsula). Geokhimiia no.3:243-248 '62.  
(MIRA 15:4)

I. Vernadsky Institute of Geochemistry and Analytical Chemistry,  
Academy of Sciences, U.S.S.R., Moscow.  
(Lovozero Tundras—Thallium) (Lovozero Tundras—Nepheline syenite)

GERASIMOVSKIY, V.I.

Mineralogy of uranium. Min. sbor. no.16:343-358 '62.  
(MIRA 16:10)  
1. Institut geokhimii i analiticheskoy khimii AN SSSR, Moskva.  
(Uranium)

GERASIMOVSKIY, V.I.

Keldyshite, a new mineral. Dokl. AN SSSR 142 no.4:916-  
918 F '62. (MIRA 15:2)

1. Institut geokhimii i analiticheskoy khimii im. V.I.  
Vernadskogo AN SSSR. Predstavлено академиком A.P.Vinogradovym.  
(Lovozero Tundras—Zirconium silicates)

GERASIMOVSKIY, V.I.; POLYAKOV, A.I.

Sphene-amphibole iolite-melteigite from the Lovozero massif.  
Dokl. AN SSSR 143 no.5:1179-1181 Ap '62. (MIRA 15:4)

1. Institut geokhimii i analiticheskoy khimii im. V. I.  
Vernadskogo AN SSSR. Predstavлено академиком A.P.Vinogradovym.  
(Lovozero tundras--Minerals)

VINOGRADOV, A.P., akademik, otv. red.; BARANOV, V.I., red.; BARSUKOV, V.L., red.; BEUS, A.A., red.; VALYASHKO, M.G., red.; GERASIMOVSKIY, V.I., red.; KORZHINSKIY, D.S., red.; RONOV, A.B., red.; TUGARINOV, A.I., red.; KHITAROV, N.I., red.; SHCHERBINA, V.V., red.; TARASOV, L.S., red. izd-va; DOROKHINA, I.N., tekhn. red.

[Chemistry of the earth's crust] Khimiia zemnoi kory; trudy. Moskva, Izd-vo Akad.nauk. Vol.1. 1963. 430 p. (MIRA 16:3)

1. Geokhimicheskaya konferentsiya, posvyashchennaya stoletiyu so dnya rozhdeniya akademika V.I.Vernadskogo, Moscow, 1963.  
(Geochemistry)

V.I. GERASIMOVSKIY (USSR)

"The geochemical features of agpaitic nepheline-syenites."

Report presented at the Conference on Chemistry of the Earth's Crust,  
Moscow, 14-19 Mar 63.

SHCHERBINA, V.V.; NAUMOV, G.B.; MAKAROV, Ye.S.; GERASIMOVSKIY, V.I.;  
YERMOLAYEV, N.P.; TARASOV, L.S.; TUGARINOV, A.I.; BARSUKOV,  
Vik.L.; SOKOLOVA, N.T.; KOCHENOV, A.V.; GERMANOV, A.I.;  
ZNAMENSKIY, V.L. red. i sg.-vap. VINOGRADOV, A.P., akademik, red;  
POLYAKOVA, T.V., tekhn. red.

[Essential features of uranium geochemistry]; Osnovnye cherty  
geokhimii urana. Pod red. A.P. Vinogradova. Moskva, Izd-vo  
AN SSSR, 1963. 350 p. (MIRA 16:10)

1. Akademiya nauk SSSR. Institut geokhimii i analiticheskoy  
khimii.

(Uranium)

SEMELEV, Yevgeniy Ivanovich; VLASOV, K.A., glav. red.;  
GERASIMOVSKIY, V.I., doktor geol.-min. nauk, otv.  
red.; TARASOV, L.S., red.izd-va; PRUSAKOVA, T.A.,  
tekhn. red.; RUS'KOVA, O.M., tekhn. red.

[Rare-earth mineralogy; mineralogy, genetic types of  
mineralization and basic characteristics of the geo-  
chemistry of rare-earth elements] Mineralogija redkikh  
zemel'; mineralogija, geneticheskie tipy mineralizatsii  
i osnovnye cherty geokhimii redkozemel'nykh elementov.  
Moskva, Izd-vo AN SSSR, 1963. 411 p. (MIRA 17:2)

1.Chlen-korrespondent AN SSSR (for Vlasov).

Gerasimovskiy, V.I.; Belyayev, Yu.I.

Chromium, nickel, vanadium, and copper contents in alkali rocks  
of the Kola Peninsula. Geokhimiia no.1:23-34 Ja '63.

(MIRA 16:9)

I. Vernadsky Institute of Geochemistry and Analytical Chemistry,  
Academy of Sciences, U.S.S.R., Moscow.  
(Kola Peninsula--Rocks, Igneous--Analysis) (Kola Peninsula--Metals)

GERASIMOVSKIY, V.I.

Geochemistry of fluorine in nepheline syenites. Geokhimiia no.3:  
237-244 Mr '63. (MIRA 16:9)

1. Vernadsky Institute of Geochemistry and Analytical Chemistry,  
Academy of Sciences, U.S.S.R., Moscow.  
(Fluorine) (Nepheline syenites) (Geochemistry)

GERASIMOVSKIY, V.I.

Unusual memory and erudition. Och.po ist.geol.znan. no.11:63-64  
'63. (MIRA 16:7)  
(Vernadskii, Vladimir Ivanovich, 1863-1945)

GERASIMOVSKIY, V.I.

Founder of the mineralogy and geochemistry of uranium. Och.po  
ist.geol.znan. no.11:99-106 '63. (MIRA 16:7)  
(Vernadskii, Vladimir Ivanovich, 1863-1945)

GERASIMOVSKIY, V.I.; SEMENOV, Ye.I.; CHEREBINA, V.V.

Kuz'ma Alekseevich Vlasov, 1905-1964; obituary. Sotskhimiia  
no.12:1332-1333 D '64. (MIRA 18:8)

GERASIMOVSKIY, V.I.

Mineral resources of India. Zap. Vses. min. ob-va 93 no.4  
487-492 '64 (MIRA 1882)

GENERAL INFORMATION

L 50190-65 EPA(s)-2/EWT(m)/EPF(n)-2/T/EWP(t)/EWP(b)/EWA(c) Pu-4  
IJP(c) WVB/ES/JD/WW/JG  
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Batulina, S. G.; Golovin, Ye. A.; Zelenova, O. I.; Kashirtseva, M. V.;  
Konarova, G. V.; Kondrat'yeva, I. A.; Lisitsin, A. K.; Perelman,  
A. I.; Sindel'nikova, V. D.; Chernikov, A. A.; Shmarovich, Ye. M.

Exogenous epigenetic deposits of uranium; formation conditions  
(Eksogennyye epigeneticheskiye mestorozhdeniya urana; usloviya  
obrazovaniya). Moscow, Atomizdat, 1965. 321 p. illus., bibliog.  
Errata slip inserted. 1100 copies printed.

TOPIC TAGS: deposit formation, epigenetic theory, exodiagenetic  
deposit, surface uranium accumulation, uranium bituminous deposit,  
uranium deposit, uranium, nuclear fuel.

PURPOSE AND COVERAGE: This book is intended for readers specializing  
in the geology of ore deposits, in particular for those concerned  
with atomic raw materials, and also for students of higher-education  
institutions. In the book, for the first time in Soviet and  
foreign literatures, the epigenetic theory of uranium-deposit  
formation is expounded. Many Soviet and foreign source materials

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have been used in this book, and some of the investigations carried out by the present authors are published in this book for the first time. Several names of Soviet scientists working in this field are mentioned. V. A. Uspenskiy collaborated on Ch. I, and N. A. Viselkina on Ch. III. The authors thank A. A. Saukov, deceased, Corresponding Member Academy of Sciences USSR, and F. I. Volfsen, D. G. Sapozhnikov, V. I. Garasimovskiy, M. P. Strankin, G. S. Gritevchenko, and I. P. Kushnarev, Doctors of Geologicco-Mineralogic Sciences; V. I. Danchev, Candidate of Geologicco-Mineralogic Sciences, and N. A. Volkovoykh. There are about 12 pages of references of which about 3/4 are Soviet.

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GERASIMOVSKIY, V.I.; PAVLENKO, L.I.; NESMEYANOVA, L.I.

Geochemistry of molybdenum in nepheline syenites. Geokhimiia  
no.1:9-15 Ja '65. (MIRA 18:4)

l. Institut geokhimii i analiticheskoy khimii imeni Vernadskogo  
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SSSR, Moskva.

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CIA-RDP86-00513R000514820010-0"

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Some requirements of the electric drives of the hoisting mechanisms of cranes. Izv. vys. ucheb. zav.; elektromekh. 7 no.8:  
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953-957 '64.

1. Kafedra elektroprivoda i avtomatizatsii promyshlennyykh ustavok Odesskogo politekhnicheskogo instituta.

PARATI, V.A., kand.tekhn.nauk, dotsent; Gerasimov, R.P., inzh.

Determining the minimum static moment of the lifting  
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D.A.; KHACHUMYAN, L.Kh.

Derivatives of p-alkoxybenzoic acids. Report No.21: Some cyclo-  
hexylalkylaminoalkyl esters of p-butoxybenzoic acids. Izv. AN  
Arm. SSR. Khim nauki 16 no.2:163-174 '63 (MIRA 17:8)

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ACC NR: AP7003844

(A,N)

SOURCE CODE: UR/0122/67/000/001/0037/0039

AUTHOR: Gerasimyak, R. P. (Engineer)

ORG: none

TITLE: Calculation of the cable load of a crane

SOURCE: Vestnik mashinostroyeniya, no. 1, 1967, 37-39

TOPIC TAGS: crane, connecting cable, motor, forced vibration, transient vibration, differential equation system/ MT 11 6 motor, MTK motor

ABSTRACT: The transient processes arising from the electromagnetic moments of the drive motor of a crane were analyzed for the dynamic forces which can cause overloading of the cable. The crane with a two-step cylindrical reducer and a normal load on the cable was reduced to an effective system of motor-shaft-drum with the equivalent parameters for each component. The differential equation describing the action of the system was transformed to a fourth order nonhomogeneous differential equation. For its solution, an electromagnetic moment of an asynchronous motor with acceleration was taken in the form of a simplified starting moment. By calculating the effects of various resistors in the rotor circuit of the MT-11-6 motor, it was found that the highest moment peak occurred at the lowest resistance. All studies were carried out for a short-circuited motor, showing that the maximum force in the cable was larger at the small perturbing frequency. At the start, the oscillation frequency of the

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IMC 621 877/875 601 06 005 - 000 -

005 021.075.071.02 005.005.5.001.24

ACC NR: AP7003844

electromagnetic moments of the motor equaled the power supply frequency and decreased with acceleration. Studies and tests for cranes with motors MTK-51-8 and MTK-41-8 showed that the overloading is caused chiefly by the constant component of the motor moment, the periodic component adding only 0.5--1%. The peaks in a balanced crane can be calculated after neglecting the periodic part because the frequency does not transmit the effect to the load. Other components can be similarly analyzed. Orig. art. has: 1 table, 2 figures, and 11 formulas.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 001

Card 2/2

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Technical and economic indices of nonbalanced electric drive  
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"Treatment of Skin Cancer with Radioactive Cobalt." Cand. Sci., Central  
Sci. Res Inst of Roentgenology and Radiology, Leningrad, 1953. (Radiol. No 4,  
Feb 55)

SO: Sum. No. 531, 24 Aug 55 - Survey of Scientific and Technical Dissertations  
Defended at USSR Higher Educational Institutions (1 )

SAMVELYAN, V.M.; GERASIMYAN, D.A.

Prevention of experimental hyperkinesias by cholinolytic  
compounds from the group of diethylaminopropyl esters of  
diphenylalkoxyacetic acid. Izv. AN Arm. SSR. Biol. nauki  
16 no.12:11-18 D '63. (MIRA 17:2)

1. Institut tonkoy organicheskoy khimii AN Armyanskoy SSR.

USSR/Farm Animals - Poultry

Q

Abs Jour : Ref Zhur - Biol., № 15, 1958, 69420

Author : Gerasimyan, E.A., Astsatryan, N.M.

Inst : Armenian Scientific Research Institute of Animal Husbandry and Veterinary Medicine

Title : On the Standardization of Silage from Carrots in the Rations of Hens

Orig Pub : Byul. nauchno-tekhn. inform. Arm. n.-i. in-ta zhivotnovodstva in veterinarii, 1957, № 1, 20-22

Abstract : It was noted that feeding 40 g of silage daily, per head, during 2½ months to hens weighing 1.2 kg had an adverse effect on their egg production. The author assumes that the harmful influence of such a quantity of silage was caused by a considerable content of organic acids in the silage. It is recommended to include in the rations of

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USSR/Farm Animals - Poultry

Q

Abs Jour : Ref Zler - Biol., № 15, 1958, 69420

Laying hens 20 g of silage from corncobs daily, per head.  
-- A.D. Musin

Card 2/2

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GERASIMOVICH

USSR/Farm Animals. Small Horned Cattle

Q-3

Abs Jour : Rof Zhur - Biol., No 11, 1958, No 50009

Author : Gerasimovich E., Mikhailov: Z.F.  
Inst : Armenian Scientific Research Institute of Animal Husbandry  
and Veterinary Sciences.  
Title : The Effects of Rations with Variegated Grass Content Upon  
the Food Digestibility in Lactating Cows.

Orig Pub : Tr. Arm. n.-i. in-ta zhivotnovodstva i veterinarii, 1957,  
2, 153-164

Abstract : One group of cows received a diet consisting of 90 percent of grass and 10 percent of concentrates, and another group received 70 percent, 20 percent, and 10 percent respectively of cotton plant peeling. The protein content was the same in all rations. Digestibility of the first diet was higher with respect of organic substances by 6.39 percent, with respect to proteins by 6.55 percent, and with respect to cellulose by 7.53 percent.

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SO Knightay leto; 1st  
No 2, 1966.